**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1. (Currently amended) ~~A method for semi-continuous culture of plant cells in a nutrient medium, the method comprising monitoring pH of the medium to monitor expression of an expression product made by the cells, wherein the expression product is encoded by a polynucleotide under the control of an inducible promoter~~ A method for production of a recombinant expression product using semi-continuous culture of transgenic plant cells comprising a heterologous expression cassette comprising a polynucleotide encoding the expression product operably linked to a promoter induced by sugar depletion, the method comprising the step of exchanging an induction medium with a growth medium after the induction medium pH increases.

2-3. (Cancelled)

4. (Currently amended) The method of claim ~~3~~ 1, wherein the α-amylase promoter is RAmy3D.

5. (Currently amended) The method of claim ~~2~~ 1, wherein the polynucleotide encoding the expression product is a human $\alpha_1$-antitrypsin polynucleotide.

6. (Original) The method of claim 5, wherein the human $\alpha_1$-antitrypsin gene is optimized for expression in plant cells.

7. (Withdrawn) The method of claim 1, further comprising the step of exchanging the medium when the pH is above 6.5.

8. (Withdrawn) The method of claim 7, wherein the step of exchanging the medium is carried out when the pH is above 7.0.

9. (Withdrawn) The method of claim 7, wherein the step of exchanging the medium is carried out by replacing an induction medium with a growth medium.

10. (Withdrawn) The method of claim 1, wherein the plant cell is a rice cell.

11. (Withdrawn) The method of claim 1, further comprising measuring oxygen uptake rate of the plant cells.

12. (Withdrawn) The method of claim 11, further comprising exchanging a growth medium with an induction medium when the oxygen uptake rate is above 2.0 mmol $O_2$/Lhr.

13. (Withdrawn) The method of claim 12, wherein the step of exchanging the growth medium with the induction medium when the oxygen uptake rate is above 5.0 mmol $O_2$/Lhr.

14. (Cancelled)

15. (Currently amended) The method of claim [14] 1, wherein the transgenic plant cells are rice cells.

16. (Currently amended) The method of claim 15, wherein ~~the polynucleotide encoding~~ the expression product is a human $\alpha_1$-antitrypsin ~~polynucleotide~~ protein.

17. (Currently amended) The method of claim [14] 1, further comprising measuring oxygen uptake rate of the plant cells and replacing the growth medium with the induction medium when the oxygen uptake rate is above 2.0 mmol $O_2$/Lhr.

18. (New) The method of claim 1, comprising the step of exchanging the induction medium with a growth medium when the pH of the induction medium is above 5.5.

19. (New) The method of claim 1, comprising the step of exchanging the induction medium with a growth medium when the pH of the induction medium is above 6.0.

20. (New) The method of claim 1, further comprising the step of isolating the recombinant expression product from the induction medium.

21. (New) The method of claim 1, wherein the promoter is a cereal α amylase promoter.

22. (New) The method of claim 1, wherein the promoter is a member of the group consisting of a RAmy1A promoter, a RAmy1B promoter, a RAmy2A promoter, a RAmy3A promoter, a RAmy3B promoter, a RAmy3C promoter, a RAmy3D promoter, a RAmy3E promoter, an αAmy8 promoter, a pM/C promoter, a gKAmy141 promoter, a gKAmy155 promoter, an Amy32b promoter, and a barley HV18 α-amylase promoter.

23. (New) The method of claim 1, wherein the promoter is a rice α-amylase promoter.

24. (New) The method of claim 1, wherein the promoter is an αAmy8 promoter.

25. (New) The method of claim 11, wherein the promoter is a RAmy3D promoter.